

(12) UK Patent Application (19) GB (11) 2 315 898 (13) A

(43) Date of A Publication 11.02.1998

(21) Application No 9616053.6

(22) Date of Filing 31.07.1996

(71) Applicant(s)
Rusty Maguire
115 Melville Court, Chatham, Kent, ME4 4XL,
United Kingdom.

David John Knott
80 Melville Court, CHATHAM, Kent, ME4 4XJ,
United Kingdom

(72) Inventor(s)
Rusty Maguire
David John Knott

(74) Agent and/or Address for Service
Rusty Maguire
115 Melville Court, Chatham, Kent, ME4 4XL,
United Kingdom

(51) INT CL⁶
G08B 21/00

(52) UK CL (Edition P)
G4N NPL

(56) Documents Cited
GB 2291303 A GB 2276478 A GB 2276025 A
GB 2248330 A GB 2112600 A GB 2071956 A

(58) Field of Search
UK CL (Edition O) G4N NPL

(54) Vicinity monitoring system

(57) It is very easy to inadvertently put an item down and walk away from it.
This invention relates to a device which alerts when out of range of an associated signal.
An example of this idea might be found incorporated into a cellular phone which is modified to emit a radio signal (of limited strength) continually or intermittently. This signal is monitored by a system which might be found incorporated into a wrist watch. This system samples the emitted signal (either intelligently or by loss of signal) and reacts by for example activating an alarm or a vibrating module.
An override facility may be provided.

GB 2 315 898 A

According to the present invention there is provided a vicinity monitoring system which consists of two principle articles:-

- 1) The transmitter
- 2) The Receiver

1) The Transmitter

Either incorporated into existing pieces of equipment or a stand-alone self-powered device which ;

- i) Emits a continual or intermittent un-modulated radio signal of controlled power at a suitable wavelength/s.
- ii) Emits a continual or intermittent modulated radio signal at a suitable wavelength/s.

2) The Receiver

Either incorporated into existing pieces of equipment or a stand-alone self-powered device which ;

receives a continual or intermittent un-modulated radio signal of a dedicated or range of wavelengths and reacts to signal strength or loss to activate an audible, tactile or visual warning. The receiver may sample at controlled intervals.

OR

receives a continual or intermittent modulated radio signal of a dedicated or range of wavelengths and reacts to distance intelligence to activate an audible, tactile or visual warning. The receiver may sample at controlled intervals

Interval sampling may be used to compensate for temporary signal loss due to environmental conditions.

CLAIMS

- 1) A proximity system that alerts the end user either audibly, mechanically or visually that a distance threshold has been breached.
- 2) A system as in claim 1 comprising of a radio transmitter and associated receiver.
- 3) A system as in claim 2 wherein the associated receiver transduces the radio signal into an electrical signal which has the ability to activate the physical output (or an alternative interface).
- 4) A system as in claim 2 wherein a radio wave is propagated by a system that is amalgamated with an existing radio emitting/receiving device.
- 5) A system as in claim 2 wherein a radio wave is propagated by a solely dedicated system.
- 6) A system as in claim 2 wherein distance monitoring is effected using an unmodulated radio wave
- 7) A system as in claim 2 wherein distance monitoring is effected using a modulated radio wave.
- 8) A system as in claim 2 wherein distance monitoring is effected with reference to an intelligent radio wave.
- 9) A system as in claims 6,7,8 wherein the radio wave is transmitted intermittently.
- 10) A system as in claims 6,7,8 wherein the radio wave is transmitted continually.

11)A system as in claim 3 wherein the receiver samples a radio wave intermittently.

12)A system as in claim 3 wherein the receiver samples a radio wave continually.

13)A system as in claim 4 wherein the radio transmitter is contained inside a radio/mobile/cellular phone.

14)A system as in claim 3 wherein the receiver is amalgamated with other electronic circuitry.

15)A system as in claim 14 wherein the receiver is incorporated into a watch.

16)A system as in claim 14 wherein the receiver is incorporated into a stand alone system.

17)A system as in claim 14 wherein the receiver is incorporated into a key-ring fob.

18)A system as in claim 14 wherein the receiver is incorporated into a receive/transmit alarm key-ring fob.

19)A system as in claim 3 wherein the receiver is independent of other electronic circuitry.

20)A system as in claim 19 wherein the receiver is incorporated into a watch.

21)A system as in claim 19 wherein the receiver is incorporated into a key-ring fob.

22) A system as in claim 19 wherein the receiver is incorporated into a receive/transmit alarm key-ring fob.

23) A system as in claim 3 wherein an override to reception of the radio wave is optional.

24) A system as in claim 3 wherein an override to operation of the audible/physical/visual output is optional.



Application No: GB 9616053.6
Claims searched: 1-24

Examiner: David Summerhayes
Date of search: 4 November 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): G4N (NPL)

Int Cl (Ed.6):

Other:

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|---|--------------------|
| X | GB 2291303 A (DUFFY) | 1-24 |
| X | GB 2276478 A (DANCE) | 1-24 |
| X | GB 2276025 A (BARWELL) | 1-24 |
| X | GB 2248330 A (SEEMAN) | 1-24 |
| X | GB 2112600 A (KUNWAR) | 1-24 |
| X | GB 2071956 A (OPTOMECH) | 1-24 |

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.
& Member of the same patent family

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.